



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/581,563
Filing Date: June 02, 2006
Appellant(s): PROCTOR ET AL.

David LaPrairie
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 11/30/2009 appealing from the Office action mailed 6/29/2009.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

6,737,458	Woerner et al.	5/2004
4,677,141	Cornelius et al.	6/1987

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1 to 9 and 11 to 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Woerner et al. in view of Cornelius et al.

From MPEP 2111.03, for the purposes of searching for and applying prior art under 35 U.S.C. 102 and 103, absent a clear indication in the specification or claims of what the basic and novel characteristics actually are, "consisting essentially of" will be construed as equivalent to "comprising.". Since the specification stresses only the exclusion of reinforcing fillers (which are explicitly excluded by the claims), the claimed composition will be interpreted as "comprising" the components recited therein (again, while excluding any reinforcing fillers).

Woerner et al. teach a silicone composition having improved heat stability (title) and containing a polydiorganosiloxane having two alkenyl groups, a non-reinforcing filler, a crosslinking agent and a nitrogen compound. See for instance column 1, lines 47 and on. Column 3, lines 11 and on, teach a general formula for the polydiorganosiloxane that overlaps with, considerably, the "x+y" range in the instant claims such that one having ordinary skill in the art would have found the selection of a polymer meeting (i) in claim 1 to have been obvious and well within routine experimentation.

Woerner et al. require a non-reinforcing filler which can include clay (column 3, lines 27 and on). While Woerner et al. specifically teach clay (a generic group of fillers) they do not specifically teach kaolin (a form a clay, also known as china clay or white clay). Note that these non-reinforcing fillers can be silylated (column 3, line 35). The composition of Woerner et al. includes reinforcing fillers only as an optional ingredient (column 6, lines 40 and on).

The Examiner draws attention to the working examples, for instance Example 9 on column 9. This forms a silicone elastomer sheet containing a vinyl terminated polydimethylsiloxane, talc (as a non-reinforcing filler), an SiH siloxane and Pt catalyst (curing agents meeting (iii)). *It is important to note that this composition is free of reinforcing fillers.* This silicone elastomer¹ prepared by Woerner et al. differs from that in claim 1 in that it contains talc as a non-reinforcing filler rather than treated kaolin.

¹ Please note that paragraph 2 of the specification indicates that "silicone rubber" (as used in the claim) is often referred to as silicone elastomer (as used in the prior art).

Cornelius et al. teach a method of improving heat stability of a silicone elastomer. These references represent analogous art as they both deal with the heat stability of silicone elastomers. This reference teaches the addition of surface treated white clays. Column 4, line 30, specifically teach kaolin clay. This surface treated kaolin clay meets (ii) as claimed. Column 4, lines 52 and on, teach that the pretreated white clay is useful in improving the heat stability of the silicone elastomer.

One having ordinary skill in the art would have been motivated by the teachings of Cornelius et al. to use surface treated white clay, or surface treated kaolin, as the non-reinforcing clay filler found in Woerner et al. in an effort to obtain the known benefits and properties thereof, including improved heat stability. Motivation arises both from the fact that the non-reinforcing fillers taught in Woerner et al. include clays in general and the fact that Woerner et al. are concerned with heat stability. The combination of the specific clay filler in Cornelius et al., combined with the silicone composition of Woerner et al., would have yielded predictable results to one having ordinary skill in the art. In this manner claim 1 is rendered obvious by this combination of references.

For instance, it would have been obvious to one having ordinary skill in the art to use the surface treated kaolin of Cornelius et al. in place of the non-reinforcing talc filler in Example 9, with an expectation of obtaining a comparable composition having improved heat stability. Note that the sheet formed in Example 9 is specifically referred to as an elastomer. In this manner the skilled artisan would have found claim 1 obvious.

For ease in expressing the obviousness rationale, the Examiner notes that she has specifically referred to Example 9 in the above rejection. The totality of the teachings in Woerner et al. also are sufficient for rendering the claims obvious. Note for instance that the abstract and the claims indicate that elastomers can be formed from the silicone composition *in the absence of a reinforcing filler*. Column 6, lines 40 and on, indicates that mechanical strength is increased *if* reinforcing fillers are included, but this does not require such fillers. Note too that a reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill the art, including nonpreferred embodiments.

For claim 2, please note the bottom of column 2 which indicates that the polydi-organosiloxane may be a mixture of two siloxanes.

For claims 3 and 4, the Examiner notes that Cornelius teaches surface treating the kaolin clay therein with a vinyl silane (column 4, line 50). While such a silane is different from the alkoxysilane in these claims (since the OR group in Cornelius will be a hydrolyzable methoxyethoxy rather than a hydrolyzable methoxy), this is a product by process type limitation in which the product per se, the surface treated kaolin, appears to be inherently the same. The Examiner notes that the alkoxy groups from both silanes undergo reaction with the surface of the kaolin and/ or with each other to form the surface treated kaolin.

For claim 5, note that the weight range of (A) and (B) in Woerner et al. is such that it overlaps with that claimed. One having ordinary skill in the art would have been motivated to adjust the amount of non-reinforcing filler and polyorganosiloxane polymer in an effort to adjust the properties associated with each component. It has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art (i.e. does not require undue experimentation).

For claims 6 and 7, please see the crosslinking components (C) found on the bottom of column 1. Also see the bottom of column 3 which teaches specific peroxides.

For claim 8, note that mixing steps (i) and (ii) as claimed are the same as that in Example 9. That is the non-reinforcing filler and polydimethylsiloxane are first mixed, followed by the addition of the curing agent and curing by heat.

The methyl substitution in Example 9 meets claim 11.

For claims 12 and 13, see that noted supra regarding claims 2 to 4.

(10) Response to Argument

Initially the Examiner would like to note that appellants' arguments do not address the rejection rationale for the dependent claims or for the specific requirements

of claim 8. Appellants' remarks are directed toward the requirements and limitations found in the broadest claim. Correspondingly, the Examiner's remarks will only be directed towards the limitations in claim 1.

The examiner also notes that appellants do not specifically traverse the Examiner's position that Woerner et al. render obvious the polymer (i) as claimed. Appellants also have not argued that the phrase "consisting essentially of" excludes anything from the claimed composition (again noting that the claim includes specific language excluding reinforcing fillers).

Appellants' arguments rely heavily on the Declaration under 37 CFR 1.132 by inventor Michael Proctor. They argue that the Examiner has inappropriately rejected the various "factual" statements in the Declaration (see the second full paragraph on page 13 of the Appeal Brief). The brief indicates that the Declarant has sworn on the record, under penalty of perjury and potential invalidity of any issued patent, to various facts.

From this, it appears that appellants would have the inventor's own Declaration based on summaries and opinion be entered as fact without question or hesitation. The Examiner simply cannot give a self serving Declaration that contains only conclusions and opinions by a biased Declarant the weight of fact.

For instance, there are errors in the Declaration that casts doubt on one's ability to unquestioningly believe (as appellants would have her do) the statements therein.

Note that, in the remarks below, '458 refers to Woerner et al. while '141 refers to Cornelius et al.

The Declaration states "it is apparent that the '458 patent provides a silicone elastomer that includes both reinforcing and non-reinforcing fillers and has improved heat stability" (paragraph 10 of the Declaration). This simply is not true. This simply is not apparent from the teachings in '458. There is nothing in '458 that indicates that reinforcing fillers are required and, in fact, patentees specifically make elastomers with only a non-reinforcing filler. This was noted in the rejection supra.

The Declaration also states that the non-reinforcing fillers in '458 are treated with nitrogen containing compounds (in paragraph 10 of the Declaration). This also is not true. While the fillers may be surface modified with silylating agents (column 3, lines 27 to 35) they are not surface treated with the amine compound. In fact, the amine compound need not even be present during admixture of the ingredients in '458 as it can be produced during crosslinking or subsequent heating of the crosslinked silicone elastomer (column 6, lines 27 to 30).

The Declaration provides numerous unsupported statements that the Examiner cannot blindly accept as fact. They state that the '458 patent does not form a useable silicone elastomer through the use of the vinyl functional PDMS and the non-reinforcing fillers alone (first full paragraph on page 5 of the Declaration). The Declarant asserts that the skilled artisan would recognize this. Not only is this statement inconsistent with the teachings in '458 (which actually show elastomers prepared from vinyl functional PDMS and the non-reinforcing fillers alone), the Declarant has provided *nothing* other than his own opinion to support this. The Examiner has to question why patentees would perform tests on a silicone elastomer such as that in Example 9, prepared through the use of the vinyl functional PDMS and the non-reinforcing fillers alone, if such a silicone elastomer was not useable.

Page 5 of the Declaration further states that, without reinforcing fillers, the product in '458 would be better described as a coating or cross-linkable fluid and not as an elastomer. Again there is nothing to support this. The Examiner has to question, too, why the sheet formed in Example 9 is specifically referred to as an elastomer if it is actually a coating or a crosslinkable fluid.

In short, the remarks in the Declaration appear to contradict that taught in the prior art. The Examiner cannot simply dismiss that found in the prior art in favor of that which is asserted in the self serving Declaration by inventor Proctor. Please note that declarations attacking the operability of a patent cited as a reference must rebut the presumption of operability by a preponderance of the evidence. Allegations such as those presented in the Declaration do not rise to the level of a preponderance of evidence.

Moving beyond the Declaration of Inventor Proctor, the Examiner does not find the rest of appellants' arguments to be persuasive.

Appellants admit that they refer to silicone rubbers as silicone elastomers in para. 2 of the instant specification. Thus while the claims are directed to a silicone rubber and the prior art refers to an elastomer, there does not appear to be a difference between the two. Appellants state that this dual naming system has been a source of confusion. They refer to specific mechanical properties associated with elastomers. They indicate that '458 does not form a useable silicone elastomer but do not indicate why, then, '458 refers to the compositions free from a reinforcing filler as a silicone elastomer. It is not clear from this if appellants are trying to import some type of mechanical property or mechanical strength requirement into the instant claims with these arguments. If so, the Examiner notes that she cannot read limitations into the claims.

Page 16 of the brief states that "the Declarant clarified the definition of silicone elastomer/rubber in the Declaration" but the Examiner cannot find anything in the Declaration that provides a clear definition of elastomer. The Declaration does not clarify anything.

Appellants then address the Cornelius reference by stating that this reference requires a reinforcing filler. The Examiner agrees with this, but that does not affect the basis for the rationale in combining the two references.

Appellants argue that the kaolin in '141 is treated for a different reason than in the instant application (the Examiner notes that this argument does specifically refer to claim 12). The fact remains that both the prior art and the claimed kaolin is surface treated with an Si-vinyl silane to provide functional vinyl groups on the surface thereof. The claimed kaolin embraces kaolin that has been treated to be reactive. Appellants' position that there is no overlap or similarity with the treated kaolin in '141 and the invention is not persuasive. The claims are generally drawn to any type of treated kaolin (claim 1) and slightly more narrowly drawn to kaolin that can be treated with a Si-vinyl compound (claim 12). This is the same as that shown in the prior art.

Arguments drawn to "large loads" of white clay are also not persuasive as claim 1 is not limited to any amount of treated kaolin.

In summary, the Examiner has made a reasonable position of obviousness. Appellants rely on a self serving Declaration based on opinion and assertions of truth in an effort to overcome the obviousness of the claims. The Examiner simply cannot find such a declaration to be clear and convincing evidence of unobviousness. Appellants have not met their burden in establishing that the claims are, in fact, unobviousness over this combination of references.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Margaret Moore
/Margaret G. Moore/
Primary Examiner, Art Unit 1796

Conferees:
Randy Gulakowski
/RANDY GULAKOWSKI/
Supervisory Patent Examiner, Art Unit 1796

/James J. Seidleck/
Supervisory Patent Examiner, Art Unit 1796

